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**REMARKS**

Favorable reconsideration of the application is respectfully requested in light of the amendments and remarks herein.

Upon entry of this amendment, claims 1-2, and 4-22 will be pending. By this amendment, claims 1, 15, and 18 have been amended.

**§103 Rejection of Claims 1-2, 5-8, 12, 15-16, 18 and 21**

In Section 4 of the Office Action, the Examiner has rejected claims 1-2, 5-8, 12, 15-16, 18 and 21 under 35 U.S.C. §103(a) as being unpatentable over Schwaderer (U.S. Patent 6,393,496; hereinafter referred to as “Schwaderer”) in view of Kanamori (U.S. Patent 6,338,079; hereinafter referred to as “Kanamori”). This rejection is respectfully traversed below.

Regarding claim 1, as shown above, claim 1 has been amended and calls for:

1. (Currently Amended) Method for communication between an application program and a network device driver program through intermediate structure software, comprising the steps of:
  - a. supplying of application data units from the application program to a first program object being part of the intermediate structure software;
  - b. performing of first functions of the first program object on the application data units;
  - c. supplying of resulting first data units from the first program object to a second program object being part of the intermediate structure software;
  - d. performing of second functions of the second program object on the first data units;
  - e. supplying of the resulting second data units to the network device driver program;wherein supplying data units between program objects is accomplished by passing references pointing to memory locations storing data of the data units such that the references are passed

between program objects and the data of the data units is not passed directly between program objects, and  
wherein for at least one application data unit, the referenced memory location storing data of the application data unit is the same memory location as the referenced memory location storing at least some of the data of the corresponding first data unit and as the referenced memory location for storing at least some of the data of the corresponding second data unit.

Accordingly, in one aspect of claim 1, the memory location storing data of the application data unit is pointed to by a reference passed between the program objects. This same memory location, pointed to by a reference passed between the program objects, also stores data of the corresponding first data unit and at least some data corresponding to the second data unit. In sum, one memory location stores data from each of three data units, and this memory location is pointed to by references passed between program objects.

Considering the Examiner's rejection of claim 1 in Section 4 of the Office Action as applied to amended claim 1, it does not appear that the arguments presented by the Examiner in rejecting claim 1 over Schwaderer in Section 4 of the Office Action establish how the cited combination of Schwaderer and Kanamori shows or suggests amended claim 1. In Section 4, the Examiner refers to Column 1, lines 20-21, 27-28 and 37 to 41 of Kanamori and appears to argue that these portions of Kanamori show passing references as called for in claim 1. However, it does not appear that the Examiner has explained how this passage of Kanamori addresses keeping the data for the data units in the same memory location as called for in claim 1. The only reference made by the Examiner to the "same memory location" element of claim 1 appears to be in the Examiner's discussion of Schwaderer on page 3 of the Office Action. The Examiner states on page 3: "the memory locations of the data units are the same (lines 19-30 column 4)." The referenced portion of Schwaderer states:

“The present invention also includes a media control layer functionally positioned between the operating system and the network. The media control layer receives operating system I/O calls from the operating system and translates the data or requests into a message or packet the network will understand. Use of the media control layer allows application program and operating system operation in a manner which is independent of the network requirements. A network device driver can also be included functionally positioned between network and the media control layer. The network device drive is responsible for the hardware communication control between the set top box and the network.”

It is not clear how this passage of Schwaderer shows that the data for the data units is kept in the same memory location. It does not appear that this passage addresses memory locations at all.

Without further explanation by the Examiner, it is submitted that the Examiner has not established how the cited combination of Schwaderer and Kanamori shows or suggests keeping the data units in the same memory location, pointed to by references passed between program objects, as called for in amended claim 1.

Accordingly, it does not appear that the Examiner has established how the cited combination of Schwaderer and Kanamori, as referenced by the Examiner in rejecting claim 1, shows or suggests at least these aspects of claim 1. Therefore, it is submitted that the Examiner has not established how the cited combination of Schwaderer and Kanamori shows or suggests amended claim 1 as a whole. Claims 2, 5-8, 12, and 21 depend from claim 1, and it is also submitted that the Examiner has not established how the cited combination of Schwaderer and Kanamori shows or suggests claims 2, 5-8, 12 and 21, through their dependence on claim 1. Similar arguments apply to claims 15 and 18, and so to claim 16 that depends from claim 15.

Based upon the foregoing, it is submitted that claims 1-2, 5-8, 12, 15-16, 18 and 21 are not anticipated by nor rendered obvious by the teachings of Schwaderer and Kanamori, as presented and referenced by the Examiner. Accordingly, it is submitted that the Examiner's

rejection of claims 1-2, 5-8, 12, 15-16, 18 and 21 based upon 35 U.S.C. §103(a) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

§103 Rejection of Claims 9-11, 17, 20 and 22

In Section 5 of the Office Action, the Examiner has rejected claims 9-11, 17, 20 and 22 under 35 U.S.C. §103(a) as being unpatentable over Schwaderer in view of Kanamori, and further in view of Tanenbaum (Network Architecture, 1992 publication; hereinafter referred to as "Tanenbaum"). This rejection is respectfully traversed below.

Claims 9-11, 20, and 22 depend from claim 1. As discussed above, it is submitted that the rejection of claim 1 has been overcome. Therefore, it is respectfully submitted that the rejections of claims 9-11, 20 and 22 have also been overcome through the dependence of claims 9-11, 20 and 22 upon claim 1.

In addition, regarding claim 20, as shown above, claim 20 calls for:

20. (Previously Presented) Method according to claim 10, wherein at least two data units referenced by a service data unit are stored in non-contiguous portions of memory.

Accordingly, in claim 20, for at least one service data unit, at least two data units referenced by the service data unit are stored in non-contiguous portions of memory. (See, e.g., Figures 5-7.) The Examiner appears to refer to Tanenbaum (last paragraph page 21 to line 3 page 22) to show claim 20, as the Examiner did in the last office action. However, as mentioned in the previous amendment, it does not appear that this passage of Tanenbaum addresses how data is stored or arranged in memory and so does not appear to address storing the data units referenced by a service data unit in non-contiguous portions of memory. For this reason as well,

it is submitted that the Examiner has not established how the cited combination of Schwaderer Kanamori, and Tanenbaum, as referenced by the Examiner, shows or suggests claim 20.

In addition, regarding claim 22, as shown above, claim 22 calls for:

22. (Previously Presented) Method according to claim 1, further comprising creating a service data unit for each application data unit, each service data unit including a size value indicating the size of data of the application data unit and an offset value indicating the memory location storing data of the application data unit,  
wherein supplying data units between program objects by passing references includes passing service data units corresponding to the supplied data units.

Accordingly, in one aspect of claim 22, the service data unit for an application data unit includes a size value and an offset value. The size value and offset value indicate aspects of the data and memory location referenced by the service data unit. (See, e.g., Figure 5-7.) On page 6 of the Office Action, the Examiner states:

“Tanenbaum further teaches creating a service data unit (SDU, line 4 last paragraph page 21) with a size value and an offset value for each application data unit (second paragraph page 22).”

It appears the Examiner argues that the SDU discussed in Tanenbaum contains a size value and offset value for each application data unit. However, the cited portion of Tanenbaum does not discuss a size value or offset value at all. Rather, this section discusses how an SDU, as part of IDU, is sent across a network, along with control information. This section indicates that the control information may contain the number of bites of the SDU. However, the size value in claim 22 indicates the size of data of the application data unit, not the service data unit. The offset value in claim 22 indicates the memory location storing data of the application data unit, and does not appear to be discussed in the cited passage of Tanenbaum. It appears that the SDU components described in claim 22 are not disclosed or suggested by the cited passage of

Tanenbaum. Without further explanation by the Examiner, it is submitted that the Examiner has not established how the cited combination of Schwaderer and Tanenbaum, as referenced by the Examiner, shows or suggests claim 22.

Based upon the foregoing, it is submitted that claims 9-11, 17, 20 and 22 are not anticipated by nor rendered obvious by the teachings of Schwaderer, Kanamori, and Tanenbaum, as presented and referenced by the Examiner. Accordingly, it is submitted that the Examiner's rejection of claims 9-11, 17, 20 and 22 based upon 35 U.S.C. §103(a) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

§103 Rejection of Claims 4, 13, and 19

In Section 6 of the Office Action, the Examiner has rejected claims 4, 13, and 19 under 35 U.S.C. §103(a) as being unpatentable over Schwaderer in view of Kanamori, and further in view of Jardine (U.S. Patent 5,619,647; hereinafter referred to as "Jardine"). This rejection is respectfully traversed below.

Claims 4, 13, and 19 depend from claim 1. As discussed above, it is submitted that the rejection of claim 1 has been overcome. Therefore, it is respectfully submitted that the rejection of claims 4, 13, and 19 has also been overcome through the dependence of claims 4, 13, and 19 on claim 1.

Based upon the foregoing, it is submitted that claims 4, 13, and 19 are not anticipated by nor rendered obvious by the teachings of Schwaderer, Kanamori, and Jardine, as presented and referenced by the Examiner. Accordingly, it is submitted that the Examiner's rejection of claims 4, 13, and 19 based upon 35 U.S.C. §103(a) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

§103 Rejection of Claim 14

In Section 7 of the Office Action, the Examiner has rejected claim 14 under 35 U.S.C. §103(a) as being unpatentable over Schwaderer in view of Kanamori, and further in view of Phillips (U.S. Patent 6,289,393; hereinafter referred to as "Phillips"). This rejection is respectfully traversed below.

Claim 14 depends from claim 1. As discussed above, it is submitted that the rejection of claim 1 has been overcome. Therefore, it is respectfully submitted that the rejection of claim 14 has also been overcome through the dependence of claim 14 on claim 1.

Based upon the foregoing, it is submitted that claim 14 is not anticipated by nor rendered obvious by the teachings of Schwaderer, Kanamori, and Phillips, as presented and referenced by the Examiner. Accordingly, it is submitted that the Examiner's rejection of claim 14 based upon 35 U.S.C. §103(a) has been overcome by the present remarks and withdrawal thereof is respectfully requested.



**CONCLUSION**

In view of the foregoing, entry of this amendment, and the allowance of this application with claims 1-2 and 4-22 is respectfully solicited.

In regard to the claims amended herein and throughout the prosecution of this application, it is submitted that these claims, as originally presented, are patentably distinct over the prior art of record, and that these claims were in full compliance with the requirements of 35 U.S.C. §112. Changes to these claims, as presented herein, are not made for the purpose of patentability within the meaning of 35 U.S.C. §§101, 102, 103 or 112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

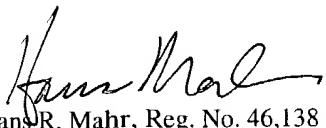
In the event that additional cooperation in this case may be helpful to complete its prosecution, the Examiner is cordially invited to contact Applicants' representative at the telephone number written below.

The Commissioner is hereby authorized to charge any insufficient fees or credit any overpayment associated with the above-identified application to Deposit Account 50-0320.

Respectfully submitted,

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